

NASA CENTRAL OPERATION OF RESOURCES
FOR EDUCATORS (CORE)
Administered by Lorain County Joint Vocational School
NASA Cooperative Agreement NCC5-554
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PROJECT DESCRIPTION

The Central Operation of Resources for Educators (CORE), operated through a cooperative agreement with Lorain County Joint Vocational School, serves as the worldwide distribution center for NASA-produced multimedia educational materials. CORE also supports the state-based NASA Educator Resource Center Network (ERCN) with materials and training to assist the Educator Resource Center (ERC) staff in better serving educators within their region.

CORE regularly communicates with the ERCN concerning required monthly reporting, internal professional development opportunities, and the availability of new products and materials. The ERCN includes more than 60 state-based sites located at universities, museums, and science centers. CORE also demonstrates applications of science, technology, engineering, and mathematics (STEM) and related content areas by providing curriculum support materials and opportunities for educators and students.

PROJECT GOALS

CORE directly supports the NASA Education Strategic Coordination Framework, specifically NASA Education Outcome 2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty. CORE supports this outcome through the following goals:

- Reproduce and distribute NASA's aerospace audiovisual and multimedia educational materials to K-16 educators nationally and internationally.
- Identify appropriate NASA educational publications with audiovisual and multimedia products to enhance K-16 educator's use of Earth Science, Space Science and other aerospace media.
- Provide personal assistance to K-16 educators with information, resources, technical support and referrals for NASA programs and services as it

relates to science, technology, engineering, and mathematics in aerospace products.

- Partner and collaborate with NASA to assure that a broader number of educators in minority and underrepresented schools have access to NASA audiovisual and multimedia aerospace products and NASA programs.
- Facilitate collaboration with universities, industry, professional educational organizations, Department of Education, National Science Foundation, and NASA to ensure that a greater number of educators have access to NASA audiovisual and multimedia aerospace products.
- Demonstrate the use of NASA educational materials and technology to pre-service, formal and informal educators through training workshops provided via distance learning, on-site and off-site sessions.

PROJECT BENEFIT TO OUTCOME 2

CORE supports Outcome 2 through the following:

- Reproducing and distributing NASA's aerospace audiovisual and multimedia educational materials to K-16 educators nationally and internationally
- Identifying appropriate NASA educational publications with audiovisual and multimedia products to enhance K-16 educator's use of Earth Science, Space Science and other aerospace media
- Providing personal assistance to K-16 educators with information, resources, technical support and referrals for NASA programs and services as it relates to science, technology, engineering, and mathematics in aerospace products
- Partnering and collaborating with other NASA education projects to assure that a greater number of educators in minority and underrepresented schools have access to NASA audiovisual and multimedia aerospace products and NASA programs
- Facilitating collaboration with universities, industry, professional educational organizations, Department of Education, National Science Foundation, and the NASA education projects to assure that a broader number of educators have access to NASA audiovisual and multimedia aerospace products
- Demonstrating the use of NASA educational materials and technology to pre-service, formal and informal educators through training workshops provided via distance learning, on-site and off-site sessions

PROJECT ACCOMPLISHMENTS

A total of 9,425 educators were served through CORE with 56,527 curriculum

support products. These products include:

- 38,380 Educational Publications such as Educator Guides, Posters, Lithograph Pictures, etc.
- 147 Video Tapes with Educator Guides
- 775 Video Tapes
- 26 Slide Sets with Scripts
- 2,383 Educational CD-ROMs
- 2,698 Educational DVDs
- 50 Electronic Resources (Individualized assistance in navigating electronic resources)
- 12,068 Non-Technical NASA Information Publications

In addition to the project contributions to the PART measures listed below, CORE's accomplishments for FY09 included promotion to the ERCN for participation in all seven eEducation Product Showcases: Lunar Nautics (October 8, 2008), Student Observation Network (November 19, 2008), eClips (December 10, 2008), and STS-119 - Spacesuits (January 28, 2009), Chemistry: What Is Your Cosmic Connection to the Elements? (Feb. 25, 2009), and the Kepler Mission (March 25, 2009), and Meteorology: An Educator's Resource for Inquiry-Based Learning (April 29, 2009). A CORE ordering page technical development is complete. Paperwork Reduction Act and Privacy Act assessments are being reviewed with assistance of the MSFC CIO office.

PROJECT CONTRIBUTIONS TO PART MEASURES

CORE and the ERCN contribute to Part Measure: "Percentage of elementary and secondary educators who obtain NASA content-based education resources or participate in short-duration NASA education activities and use NASA resources in their classroom instruction." During FY09, CORE and the ERCN reached a total of 50,348 direct participants. The percentage of elementary and secondary educators using NASA content-based STEM resources in the classroom was 84.7 percent. This percentage is based on the number of replies to a follow-up survey where 39 of 46 participants reported they are in fact using the NASA materials in the classroom.

IMPROVEMENTS (e.g., project management, efficiencies, etc.) MADE IN THE PAST YEAR

CORE has worked to update its database system to a Windows-Based system. The previous database system was a D-Base system which was not operable on

new computer systems. This update was a necessary step in keeping up-to-date with technological advances.

CORE worked in collaboration with the NASA Distance Learning Network (DLN) to conclude the 2008 NASA eEducation Product Showcase Series as well as plan and promote the renamed 2009 NASA Education Resources Showcase Series. This series of 9 trainings every school year are provided to external audiences as well as internal NASA educators including the Educator Resource Center Network, NASA Explorer Schools, Aerospace Education Services Project, Digital Learning Network, Science, Engineering, Mathematics and Aerospace Academy, and Network of Educator Astronaut Teachers. These trainings were delivered through the DLN to provide introductions, demonstrations, and information about new and existing education products and services. The 2009 series will be hosted from CORE and delivered through the DLN via webcasting.

CORE continues to provide support to the Agency's educational engagement activities following STS-118, the first flight of an Educator Astronaut. CORE has put together a Seeds in Space education kit which coordinates with the Engineering Design Challenge: Lunar Plant Growth Chamber activities. CORE has distributed 5,000 Seeds in Space education kits to educators throughout the United States. CORE has also been working with the Teaching from Space team to support the Agency's educational engagement activities in support of the STS-131 mission. CORE has worked to develop an educational robotics kit which will be used through NASA educational networks to educate teachers and students regarding the science behind the robotic maneuvers to be accomplished on STS-131.

CORE worked with Caption Max to finalize the list of NASA video titles which are Close Captioned and Audio Describe. CORE has also been working with the NASA Video Archiving Project to provide copies of video, film, slides, audio cassettes and more to be digitized and placed on the NASA Portal Web site.

PROJECT PARTNERS AND ROLE OF PARTNERS IN PROJECT EXECUTION

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